CAMERON LAW & POLICY LLC

2550 M Street NW | Suite 343 | Washington DC 20037
US +1 (202) 230 4962 | UK +44 (0)20 7993 2202
M +1 (202) 999 7665 | richard@cameronlawpolicy.com

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By Electronic Filing

Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: *Rural Health Care Support Mechanism*, WC Docket No. 02-60

Dear Ms. Dortch:

On November 7, 2017, I spoke by telephone with Radhika Karmarkar, Soumitra Das, Dana Bradford, and Preston Wise of the Wireline Competition Bureau regarding the Telecommunications Program of the Commission's Rural Health Care ("RHC") universal service support mechanism.

In the conversation, I urged the Commission to amend Sections 54.609(d)(1) and (d)(3) of its rules, 47 C.F.R. §§ 54.609(d)(1) and (d)(3), to cap RHC Telecommunications Program support based on the *lower of* the rural rate for terrestrial service, or a functionally equivalent satellite service. Currently, a rural HCP that chooses to purchase satellite telecommunications service in an area where alternative terrestrial services are available, receives support that is capped at the amount it would have received for the functionally similar terrestrial alternative.[1] But, the reverse is not true: RHC program rules do not place any limit on the support available for terrestrial telecommunications services based on rates for functionally similar satellite services.

RHC Telecommunications Program Challenges in Western Alaska

Large areas of western Alaska are served by a network of terrestrial middle mile transport facilities that is owned and controlled by a single provider of terrestrial broadband telecommunications services. These facilities were constructed initially using an $88 million award of federal funding and subsidized loans through the American Recovery and Reinvestment Act's Broadband Initiatives Program ("BIP") to an affiliate of General Communication, Inc. ("GCI"). The resulting network of fiber and microwave middle mile transport facilities served 65 communities that previously were connected exclusively by satellite.

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[1] *See Rural Health Care Support Mechanism*, WC Docket No. 02-60, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, FCC 03-288, 18 FCC Rcd 24546 (2003) ("*Rural Health Care Support Order*"), at ¶ 44.

Since receiving that initial BIP award, the network has expanded from its initial base of 65 Bush communities in southwest Alaska to serve a total of 85 western Alaska communities. But, despite federal BIP funding that offset a substantial portion of the cost of the network, prices for terrestrial broadband telecommunications services in western Alaska remain extremely high – higher, in fact, than prices for functionally similar satellite-delivered services. With no term commitment, the rate for symmetrical Ethernet service over the terrestrial network for customers located in any of five "regional centers," such as Bethel, is $8,208 per month per Mbps,[2] and the rate is even higher rates in more remote communities. In contrast, Quintillion Networks has estimated that, in Alaska, "[c]arrier-to-carrier prices on satellite range from $1,400 to $4,000 per Mbps per month,"[3] well below the $8,000+ available on the BIP-funded terrestrial network.

Analysis of USAC Funding Year 2016 data show that, in the areas served by the BIP-funded network, the network's owner received virtually all of the RHC Telecommunications Program support committed by the Universal Service Administrative Company ("USAC"). USAC committed a total of roughly $127 million to rural HCP funding requests in the state of Alaska for Funding Year 2016, with the BIP-funded network owner receiving more than $100 million of that total, as follows:

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[2] *See* GCI, "TERRA Product Descriptions and Pricing," eff. July 1, 2017, at 4 ("2017 TERRA Pricing") (showing monthly recurring charges for quantities of 1-100 Mbps, on a month-to-month basis, to points located in a "Regional Center" of $864 per 1 Mbps (Hub Port) and $7,344 per 1 Mbps (Edge Port), for a total of $8,208 per month per 1 Mbps service) (available at: https://www.gci.com/-/media/files/gci/regulatory/gci_terra_posting_effective_070117.pdf). Engineering analysis performed by Alaska Communications suggests that, while the cost of service is unquestionably high in Alaska, the actual cost of middle mile service between any community served by TERRA-SW to Anchorage, after accounting for the BIP award funding, should be lower, roughly 5 to 20 percent of GCI's posted rates. *See Connect America Fund*, WC Docket No. 10-90, White Paper, "Closing the Middle Mile Gap in Alaska: A Proposed Plan of Action for All Alaska," at 12, n.26. (attached to *Ex Parte* Letter from Karen Brinkmann, Counsel to Alaska Communications (filed Nov. 19, 2017)).

[3] National Telecommunications and Information Administration, *Telecommunications Assessment of the Arctic Region*, Docket # 140925800-4800-01, Notice of Inquiry, Submission of Quintillion Networks (Dec. 2014), at 1 (*available at:* https://www.ntia.doc.gov/files/ntia/quintillion_12022014.pdf).

Table 1: Alaska Rural Health Care Support Funding Commitments, Funding Year 2016

Rural Health Care Support	Statewide	TERRA Communities	Non-TERRA Communities
Total Committed Support (FY2016)	***$126,691,597***	***$69,070,367***	***$57,621,229***
General Communication, Inc.	$101,179,571	$66,883,899	$34,295,672
Percent of Total	79.9%	**96.8%**	59.5%
Alaska Communications	$21,065,085	$977,178	$20,087,907
Percent of Total	16.6%	1.4%	34.9%
Other Providers	$4,446,940	$1,209,290	$3,237,650
Percent of Total	3.5%	1.8%	5.6%

With ownership and control of the only terrestrial middle mile transport facilities in the region, and a market share of very nearly 100 percent in communities served by the terrestrial network, the owner of the network wields a substantial amount of market power throughout the area.

This market power is evidenced in several ways. *First*, there is no wholesale discount to other service providers that seek to purchase capacity on the terrestrial network, contrary to economic principles dictating that wholesale rates should reflect costs that the provider avoids in comparison to its retail services.[4] As a result, it is difficult for any other service provider to make a competitively-priced bid to serve any customer located within the western Alaska terrestrial network footprint. In fact, Alaska Communications is the ILEC in several communities (*e.g.*, Port Alsworth, Pedro Bay, and Nondalton) served by the fiber portion of TERRA (which faces no meaningful capacity constraint). Yet, Alaska Communications cannot offer affordable terrestrial broadband Internet access service in those communities because commercially reasonable transport rates that would enable the service are not available.

Rather, a "postallized" rate structure is used, under which rates are geographically averaged over large areas, without regard for the cost of service. Under this structure, Alaska Communications would be charged the same rate per Mbps per month in the Alaska Communications ILEC communities (which are served by fiber and are located comparatively

[4] 47 U.S.C. § 252(d)(3) (mandating that ILEC wholesale rates be set "on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier").

near the Anchorage end of the TERRA system) as it would in more remote communities located far out on the high-cost, capacity-constrained microwave portion of the system.[5]

Second, the absence of affordable wholesale rates means that customers are denied reasonable opportunities for retail competition. In communities served by the terrestrial network, asymmetrical residential Internet access service is offered by the network owner at prices far below those for commercial customers. For example, residential Internet access in Port Alsworth and Nondalton with a 6 Mbps download speed is available for a rate of $169.99 per month.[6] Based on current posted rates, the input cost of middle mile transport needed to provide this service is higher than this retail rate. For example, it would cost $364,800 per month for a 50 Mbps middle mile circuit between Anchorage and Port Alsworth or Nondalton, based on a three-year contract.[7] Even assuming a very large 100:1 oversubscription rate, such a circuit could support 833 customers with 6 Mbps downstream Internet access service. That pricing yields a per-customer cost of roughly $438 per month for the middle mile input alone. Therefore, retail competition is effectively eliminated.

Third, in such an environment, the Commission's E-rate and RHC competitive bidding mechanisms do not function well. With only a single credible bidder offering terrestrial service, rates are constrained only by the willingness and ability of the buyer – or the Commission's support mechanisms – to pay. While Alaska Communications does not propose scrapping the competitive bidding mechanism altogether, there is a clear need for reform that will introduce a more robust market constraints on terrestrial rates in the single-provider environment of western Alaska.

Capping RHC Telecommunications Program Support Based on Satellite Rates

Under the RHC Telecommunications Program, a rural HCP that elects to purchase satellite telecommunications service in an area where alternative terrestrial services are available, receives Telecommunications Program support only for the difference between the "urban rate" and the

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[5] *See, e.g., Access Charge Reform*, CC Docket No. 96-262, Fifth Report and Order and Further Notice of Proposed Rulemaking, FCC 99-206, 14 FCC Rcd 14221 (1999), at ¶ 60 (explaining that, "non-cost-based, geographically-averaged access rates could not be maintained in a market subject to increasing competition").

[6] *See* https://www.gci.com/internet#HomepageNavCTA (visited Nov. 13, 2017) (rates for Internet service in Port Alsworth, Alaska, ZIP Code 99653 and Nondalton, Alaska, ZIP Code 99640). Rates in Bethel, a TERRA "Regional Center" are higher, at between $59.99 and $299.99 per month for download speeds between 3 Mbps and 6 Mbps. *See id.* (showing rates for Internet service in Bethel, Alaska, ZIP Code 99559 that range from $59.99/month for download speed of 3 Mbps and upload speed of 512 kbps, with a data cap of 40GB, up to $299.99/month for service with download speed of 6 Mbps and an upload speed of 2 Mbps, and a data cap of 200 GB).

[7] *See* 2017 TERRA Pricing, at 4 (showing monthly price per 1 Mbps of $768 for Hub port capacity and $6,528 for Edge port capacity, for a total price per 1 Mbps of $7,296 per month, or $364,800 per month for 50 Mbps service).

"rural rate" for the functionally similar terrestrial alternative.[8] But, the RHC Telecommunications Program rules do *not* limit the support available for terrestrial telecommunications services based on rates for functionally similar satellite services. Particularly if terrestrial service in western Alaska continues to be priced at many multiples of functionally similar satellite service, the Commission should amend its RHC Telecommunications Program rules to create incentives for efficient purchases by rural HCPs.

Capping support for terrestrial telecommunications services based on the rate for functionally equivalent satellite service would serve the public interest in several ways, as follows:

First, it would create a market-based competitive check on terrestrial telecommunications service rates in western Alaska. Currently, with no *ex ante* rate regulation in place for western Alaska's terrestrial network services (*i.e.,* neither rate-of-return nor price cap constraints) and no competitive terrestrial provider economically able to enter the market in western Alaska, the RHC Telecommunications Program lacks any effective regulatory or market-based mechanism for governing rates. Capping support in western Alaska based on the cost of functionally similar satellite service will create new incentives for providers to deliver terrestrial service as efficiently as possible and reduce prices.

Second, such a cap would better enable the Commission to ensure that RHC Telecommunications Program support is being used "only for the provision, maintenance, and upgrading of facilities and services for which the support is intended."[9] With no meaningful check on rates in western Alaska, it is currently impossible for the Commission (or USAC) to determine how much of the RHC Telecommunications Program support that GCI receives is used to offset the costs of serving the rural HCP for which it was committed, and how much is used (as GCI's previous statements to the Commission have suggested) to subsidize construction of expanded TERRA facilities in distant areas or to subsidize other services.[10]

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[8] *See Rural Health Care Support Mechanism*, WC Docket No. 02-60, Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking, FCC 03-288, 18 FCC Rcd 24546 (2003) ("*Rural Health Care Support Order*"), at ¶ 44.

[9] 47 U.S.C. § 254(e).

[10] *See, e.g. Connect America Fund*, WC Docket No. 10-90, *Ex Parte* Letter from Meghan Delany, General Communication, Inc. (filed July 30, 2012), at 2-3 ("Without sufficient and sustainable universal service funding, there would be no business case to deploy the necessary middle mile infrastructure to deliver these life-saving and life-altering services to anchor institutions, small businesses and residential consumers that are currently limited to satellite-based services. ***Further deployment of modern wireless and broadband networks to additional currently unserved communities in rural Alaska therefore depends upon the provision of services to key anchor telemedicine and distance learning customers that are supported by the various programs of the Universal Service Fund*** as well as continued efforts to leverage this funding to secure other private funding sources.") (emphasis added).

Third, the cap would provide rural HCPs with better economic pricing signals necessary to incentivize efficient purchasing behavior. Today, rural HCPs pay the "urban rate," as defined in the Commission's rules,[11] for telecommunications services that are the identical or similar to those it purchases, while the RHC Telecommunications Program pays the entire difference between that "urban rate" and the "rural rate" reflected in its contract, no matter what that rate is.[12] The HCP, therefore, is absolutely insulated from the financial impact that its choice of service creates; that impact falls entirely on the Commission's RHC Telecommunications Program. By capping support for terrestrial services based on the rate for functionally similar satellite alternative, the Commission will give rural HCPs greater financial incentives to insist on lower, more efficient and affordable pricing for terrestrial service, even in the absence of a terrestrial competitor. And, if terrestrial rates remain above their satellite counterparts, such a rule will also create pricing incentives for HCPs to consume only the minimum terrestrial bandwidth necessary to meet their needs for low-latency performance, while using more economical satellite service for latency-insensitive applications.

The Commission should seek comment on how best to implement this change, including the following questions:

(1) Triggers for comparison of terrestrial and satellite rates. Because satellite service is available virtually everywhere in the nation, Alaska Communications would recommend that the Commission limit the requirement for rural HCPs and USAC to compare satellite and terrestrial rates to cases where a *bona fide* question may exist as to which is the lower-cost alternative. If USAC data reveal that the problem is likely confined to parts of Alaska, then it could adopt a rule requiring the comparison only in the affected Alaskan boroughs.

Alternatively, the Commission could adopt a trigger based on the monthly price per Mbps reflected in funding requests. As indicated above, Quintillion Networks has estimated that carrier-to-carrier prices for satellite transport service range from $1,400 to $4,000 per Mbps per month. The Commission could direct that the rural HCP submit, and that USAC examine, pricing for functionally similar satellite service if the price per Mbps per month contained in a funding request exceeds some specific amount chosen from within this range (*e.g.*, any funding requests showing a monthly price per Mbps that exceeds the midpoint of the range, or $2,700 per Mbps per month).

(2) Metrics for comparing terrestrial and satellite alternatives. Alaska Communications recommends that the Commission use the monthly price per Mbps as a metric for comparing terrestrial and satellite alternatives. A rural HCP may not always receive competing bids for satellite-based and terrestrial service that offer identical service speeds, making it difficult to compare rates directly. But, the monthly price per Mbps is a commonly-used metric in the industry, and can be readily adapted for use here.

[11] 47 C.F.R. § 54.605.

[12] 47 C.F.R. § 54.609(a).

Please direct any questions regarding this matter to me.

Very truly yours,

Digitally signed by Richard R. Cameron
Date: 2017.11.13 11:06:10 -05'00'

Richard R. Cameron
for Alaska Communications

cc: Jay Schwarz
Claude Aiken
Amy Bender
Jamie Susskind
Travis Litman
Trent Harkrader
Ryan Palmer
Radhika Karmarkar
Dana Bradford
Soumitra Das
Preston Wise